The

Geophysical Journal

of the

Royal Astronomical Society

Volume 6

Covering the period
1961 December to 1962 June

Published and Sold by the

Royal Astronomical Society
Burlington House, London, W.1, England

1962

INDEX

PAGE

Abubakar, I., Disturbance due to a line source in a semi-infinite transversely isotropic elastic medium 337
Bàth, M., Directions of approach of microseisms 450

Behrend, J. C., R. J. Wold and T. S. Laudon, Gravity base stations in Antarctica .. 400
Bentley, C. R. and N. A. Ostenso, On the paper of F. F. Evison, C. E. Ingham, R. H. Orr and J. H. LeFort "Thickness of the Earth's crust in Antarctica and the surrounding oceans" 292
Bolt, B. A. and A. Marussi, Eigenvibrations of the Earth observed at Trieste .. 299
Book Reviews:
Descriptive Palaeoclimatology 268
Soviet Researches in Geophysics, Vols. 1–4 268
Field Geology 406
Physics of the Aurora and Airglow 407
Explosion Studies of Continental Structure 554
Theory of Probability, 3rd edn. 556
Bull, C., E. Irving and I. Willis, Further palaeomagnetic results from South Victoria Land, Antarctica 320
Bullard, E. C. and D. T. Griggs, The nature of the Mohorovičić discontinuity .. 118

Carpenter, E. W., R. A. Savill and J. K. Wright, The derivation and solution of indicator equations for seismometer–galvanometer combinations including the effect of seismometer inductance 409
——, *R. A. Savill and J. K. Wright*, The dependence of seismic signal amplitudes on the size of underground explosions 426
Celestial Mechanics:
Letter to the Editors: D. G. King-Hele, The Earth's gravitational potential, deduced from the orbits of artificial satellites 270
Luni–Solar perturbations of the orbit of an Earth satellite, G. E. Cook .. 271
Clark, S. P., Heat flow in the Austrian Alps 54
Clegg, J. A. and C. W. F. Everitt, A field test of palaeomagnetic stability 312
Cole, K. D., On solar wind generation of polar geomagnetic disturbance 103
Continental Structure:
Review of "Explosion studies of continental structure" 554
Cook, G. E., Luni-solar perturbations of the orbit of an Earth satellite 271

Earth, physics of the interior of:
Mountain-building movement in Japan and its vicinity, N. Kawai 1
Eigenvibrations of the Earth observed at Trieste, B. A. Bolt and A. Marussi .. 299
The nature of the Mohorovicić discontinuity, E. C. Bullard and D. T. Griggs 118
Deformation of the Japanese islands as inferred from rock magnetism, N. Kawai, H. Ito and S. Kume 124
Everitt, C. W. F. and J. A. Clegg, A field test of palaeomagnetic stability 312

Fairbridge, R. W. and O. A. Krebs, Sea level and the Southern oscillation 532
Fowler, W. A., J. L. Greenstein and F. Hoyle, Nucleosynthesis during the early history of the solar system 148

Garland, G. D. and D. H. Lennox, Heat flow in Western Canada 245
Geodesy:
The deviation of the vertical at Bidston in response to the attraction of ocean tides, G. W. Lennon 64
Letter to the Editors: D. G. King-Hele, The Earth's gravitational potential deduced from the orbits of artificial satellites 270
Luni–solar perturbations of the orbit of an Earth satellite, G. E. Cook .. 271

PAGE

Geomagnetism:
Mountain-building movement in Japan and its vicinity, N. Kawai .. 1
On solar wind generation of polar geomagnetic disturbance, K. D. Cole .. 103
Deformation of the Japanese islands as inferred from rock magnetism, N. Kawai, H. Ito and S. Kume 124
Oscillations of the Earth's outer atmosphere and micropulsations, K. O. Westphal and J. A. Jacobs 360
Review of "Physics of the Aurora and Airglow" 407
The influence of continents and oceans on geomagnetic variations, W. D. Parkinson 441
An experiment to determine the nature of the Earth's distant magnetic field, E. R. Harrison 462
The Earth's distant magnetic field, E. R. Harrison 479
Graham, K. W. T., The re-magnetization of a surface outcrop by lightning currents .. 85
Greenstein, J. L., W. A. Fowler and F. Hoyle, Nucleosynthesis during the early history of the solar system 148
Griggs, D. T. and E. C. Bullard, The nature of the Mohorovičic discontinuity 118

Hamilton, A. C., Evaluation of the Dominion Observatory bronze pendulum apparatus 9
Harrison, E. R., An experiment to determine the nature of the Earth's distant magnetic field 462
——, The Earth's distant magnetic field 479
Heat Flow:
Heat flow in the Austrian Alps, S. P. Clark, Jnr. 54
Heat flow in Western Canada, G. D. Garland and D. H. Lennox 245
Hibberd, F. H., An analysis of the positions of the Earth's magnetic pole in the geological past 221
Hoyle, F., W. A. Fowler, J. L. Greenstein and, Nucleosynthesis during the early history of the solar system 148
Hudson, J. A., Love waves in a heterogeneous medium 131
——, The total internal reflection of SH waves 509

Irving, E., Palaeomagnetic directions and pole positions IV. Pole numbers 4/1 to 4/34 263
——, *C. Bull and I. Willis*, Further palaeomagnetic results from South Victoria Land, Antarctica 320
Ito, H., N. Kawai and S. Kume, Deformation of the Japanese islands as inferred from rock magnetism 124

Jacobs, J. A. and K. O. Westphal, Oscillations of the Earth's outer atmosphere and micropulsations 360
Jeffreys, H., Small corrections in the theory of surface waves 115
——, Some normal earthquakes 493
——, Deep foci and distribution of velocity 550
——, Letter to the Editors: Who named the milligal? 553

Kawai, N., Mountain-building movement in Japan and its vicinity 1
——, *H. Ito and S. Kume*, Deformation of the Japanese islands as inferred from rock magnetism 124
King-Hele, D. G., Letter to the Editors: The Earth's gravitational potential, deduced from the orbits of artificial satellites 270
Krebs, O. A. and R. W. Fairbridge, Sea level and the Southern oscillation 532
Kume, S., N. Kawai and H. Ito, Deformation of the Japanese islands as inferred from rock magnetism 124

Laudon, T. S., J. C. Behrend, R. J. Wold and, Gravity base stations in Antarctica .. 400
Lennon, G. W., The deviation of the vertical at Bidston in response to the attraction of ocean tides 64
Lennox, D. H. and G. D. Garland, Heat flow in Western Canada 245
Letters to the Editors:
D. G. King-Hele, The Earth's gravitational potential, deduced from the orbits of artificial satellites 270
H. Jeffreys, Who named the milligal? 553

PAGE

Magnetic Properties of Rocks:
The re-magnetization of a surface outcrop by lightning currents, K. W. T. Graham 85
Marussi, A. and B. A. Bolt, Eigenvibrations of the Earth observed at Trieste .. 299
Miller, J. A., The potassium–argon ages of the Skiddaw and Eskdale granites .. 391
——, *K. Shibata and M. Munro*, The potassium–argon age of the lava of Killerton Park, Nr. Exeter 394
Mumme, W. G., A note on the mixed polarity of magnetization in Cainozoic basalts in Victoria, Australia 546
Munro, M., J. A. Miller, K. Shibata and, The potassium–argon age of the lava of Killerton Park, Nr. Exeter 394

Nag, K. R., Disturbance due to shearing-stress discontinuity in a semi-infinite elastic medium 468
Notes on Progress in Geophysics:
E. Irving, Palaeomagnetic directions and pole positions IV. Pole numbers 4/1 to 4/34 263

Oceanography:
Interaction between tide and surge in the Thames, J. R. Rossiter 29
The deviation of the vertical at Bidston in response to the attraction of ocean tides, G. W. Lennon 64
Sea level and the Southern oscillation, R. W. Fairbridge and O. A. Krebs .. 532
Ostenso, N. A. and C. R. Bentley, On the paper of F. F. Evison, C. E. Ingham and J. H. LeFort "Thickness of the Earth's crust in Antarctica and the surrounding oceans" 292
Origin of the Solar System:
Nucleosynthesis during the early history of the solar system, W. A. Fowler, J. L. Greenstein and F. Hoyle 148

Palaeomagnetism:
An analysis of the positions of the Earth's magnetic pole in the geological past, F. H. Hibberd 221
Note on Progress in Geophysics: *E. Irving*, Palaeomagnetic directions and pole positions, Part IV. Pole numbers 4/1 to 4/34 263
A field test of palaeomagnetic stability, C. W. F. Everitt and J. A. Clegg .. 312
Further palaeomagnetic results from South Victoria Land, Antarctica, C. Bull, E. Irving and I. Willis 320
A deviating Permian pole from rocks in Northern Italy, D. van Hilten .. 377
The palaeomagnetic history of a doubly-baked rock, R. L. Wilson 397
A note on the mixed polarity of magnetization in Cainozoic basalts in Victoria, Australia, W. G. Mumme 546
Parkinson, W. D., The influence of continents and oceans on geomagnetic variations .. 441

Radioactive Dating:
The potassium–argon ages of the Skiddaw and Eskdale granites, J. A. Miller 391
The potassium–argon age of the lava of Killerton Park, Nr. Exeter, J. A. Miller, K. Shibata and Mary Munro 394
Research Notes:
The potassium–argon ages of the Skiddaw and Eskdale granites, J. A. Miller 391
The potassium–argon age of the lava of Killerton Park, Nr. Exeter, J. A. Miller, K. Shibata and Mary Munro 394
The palaeomagnetic history of a doubly-baked rock, R. L. Wilson 397
Gravity base stations in Antarctica, J. C. Behrend, R. J. Wold and T. S. Laudon 400
A note on the mixed polarity of magnetization in Cainozoic basalts in Victoria, Australia, W. G. Mumme 546
Rossiter, J. R., Interaction between tide and surge in the Thames 29

Savill, R. A., E. W. Carpenter and J. K. Wright, The derivation and solution of indicator equations for seismometer–galvanometer combinations including the effect of seismometer inductance 409
——, *E. W. Carpenter and J. K. Wright*, The dependence of seismic signal amplitudes on the size of underground explosions 426

PAGE

Seismology:

Small corrections in the theory of surface waves, H. Jeffreys 115
Love waves in a heterogeneous medium, J. A. Hudson 131
On the paper of F. F. Evison, C. E. Ingham, R. H. Orr and J. H. LeFort, "Thickness of the Earth's crust in Antarctica and the surrounding oceans", C. R. Bentley and N. A. Ostenso 292
Eigenvibrations of the Earth observed at Trieste, B. A. Bolt and A. Marussi.. 299
Disturbance due to a line source in a semi-infinite transversely isotropic elastic medium, I. Abubakar 337
The derivation and solution of indicator equations for seismometer–galvanometer combinations including the effect of seismometer inductance, R. A. Savill, E. W. Carpenter and J. K. Wright 409
The dependence of seismic signal amplitudes on the size of underground explosions, E. W. Carpenter, R. A. Savill and J. K. Wright 426
Directions of approach of microseisms, M. Båth 450
Disturbance due to shearing-stress discontinuity in a semi-infinite elastic medium, K. R. Nag 468
Some normal earthquakes, H. Jeffreys 493
The total internal reflection of SH waves, J. A. Hudson 509
Review of "Explosion studies of continental structure" 554
Deep foci and distribution of velocity, H. Jeffreys 550
Shibata, K., J. A. Miller and M. Munro, The potassium–argon age of the lava of Killerton Park, Nr. Exeter 394

Tidal Theory:

The deviation of the vertical at Bidston in response to the attraction of ocean tides, G. W. Lennon 64

van Hilten, D., A deviating Permian pole from rocks in Northern Italy 377

Westphal, K. O. and J. A. Jacobs, Oscillations of the Earth's outer atmosphere and micropulsations 360
Willis, I., C. Bull, E. Irving, and, Further palaeomagnetic results from South Victoria land 320
Wilson, R. L., The palaeomagnetic history of a doubly-baked rock 397
Wold, R. J., J. C. Behrend and T. S. Laudon, Gravity base stations in Antarctica .. 400
Wright, J. K., E. W. Carpenter, R. A. Savill and, The derivation and solution of indicator equations for seismometer–galvanometer combinations including the effect of seismometer inductance 409
——, *R. A. Savill, E. W. Carpenter and,* The dependence of seismic signal amplitudes on the size of underground explosions 426